

## SECTION I—CLAIMS

### **Amendment to the Claims:**

This listing of the claims will replace all prior versions and listings of claims in the application. No claims are amended. Claims 1-34, 36-37, 44-45, and 52-53 remain canceled herein without prejudice. No new claims are added. Claims 35, 38-43, 46-51, and 54-58 remain pending in the application.

### **Listing of Claims:**

1-34. (Canceled).

35. (Previously Presented) A method in an application server, comprising:

receiving a Web service archive including:

- a Web service implementation having a plurality of Web service operations and a plurality of Web service parameters, the Web service operations and Web service parameters being independent of runtime implementation requirements of the application server,
- a Web service deployment descriptor specifying a mapping of the Web service operations and Web service parameters to the runtime implementation requirements of the application server, and
- a first and second virtual interface, each to selectively expose a different subset of the Web service operations and the Web service parameters in the Web service implementation, wherein each of the first and second virtual interfaces are publishable as a separate deployed Web service;

unpacking the Web service implementation, the Web service deployment descriptor, and the first and second virtual interfaces from the Web service archive into a directory within the application server; and  
deploying each of the first and second virtual interfaces as separately published Web services within the application server based on the mapping specified by the Web service deployment descriptor.

36-37. (Canceled).

38. (Previously Presented) The method of claim 35, further comprising registering each of the deployed Web services with a Web services registry on the application server.

39. (Previously Presented) The method of claim 38, wherein registering each of the deployed Web services comprises automatically registering each of the deployed Web services with a Java Naming and Directory Interface (JNDI) of the application server.

40. (Previously Presented) The method of claim 35, wherein deploying each of the first and second virtual interfaces as separately published Web services within the application server comprises deploying the plurality of Web service operations and the plurality of Web service parameters in a Web services container of the application server.

41. (Previously presented) The method of claim 40, wherein the Web services container comprises a dedicated implementation container.

42. (Previously presented) The method of claim 41, wherein the dedicated implementation container comprises an Enterprise Java Bean (EJB) container or a servlet container.

43. (Previously Presented) A computer-readable medium having instructions stored thereon that, when executed by a processor in an application server, causes the application server to perform a method comprising:

receiving a Web service archive including:

- a Web service implementation having a plurality of Web service operations and a plurality of Web service parameters, the Web service operations and Web service parameters being independent of runtime implementation requirements of the application server,
- a Web service deployment descriptor specifying a mapping of the Web service operations and Web service parameters to the runtime implementation requirements of the application server, and
- a first and second virtual interface, each to selectively expose a different subset of the Web service operations and the Web service parameters in the Web service implementation, wherein each of the first and second virtual interfaces are publishable as a separate deployed Web service;

unpacking the Web service implementation the Web service deployment descriptor, and the first and second virtual interfaces from the Web service archive into a directory within the application server; and

deploying each of the first and second virtual interfaces as separately published Web services within the application server based on the mapping specified by the Web service deployment descriptor.

44-45. (Canceled).

46. (Previously Presented) The computer-readable medium of claim 43, wherein the method further comprises registering each of the deployed Web services with a Web services registry on the application server.

47. (Previously Presented) The computer-readable medium of claim 46, wherein registering each

of the deployed Web services comprises automatically registering each of the deployed Web services with a Java Naming and Directory Interface (JNDI) of the application server.

48. (Previously Presented) The computer-readable medium of claim 43, wherein deploying each of the first and second virtual interfaces as separately published Web services within the application server comprises deploying the plurality of Web service operations and the plurality of Web service parameters in a Web services container of the application server

49. (Previously presented) The computer-readable medium of claim 48, wherein the Web services container comprises a dedicated implementation container.

50. (Previously presented) The computer-readable medium of claim 49, wherein the dedicated implementation container comprises an Enterprise Java Bean (EJB) container or a servlet container.

51. (Previously Presented) An application server, comprising:  
means for receiving a Web service archive including:

a Web service implementation having a plurality of Web service operations and a plurality of Web service parameters, the Web service operations and Web service parameters being independent of runtime implementation requirements of the application server,

a Web service deployment descriptor having means for specifying a mapping of the Web service operations and Web service parameters to the runtime implementation requirements of the application server, and

a first and second virtual interface, each having means to selectively expose a different subset of the Web service operations and the Web service parameters in the Web

service implementation, wherein each of the first and second virtual interfaces are publishable as a separate deployed Web service;

means for unpacking the Web service implementation the Web service deployment descriptor, and the first and second virtual interfaces from the Web service archive into a directory within the application server; and

means for deploying each of the first and second virtual interfaces as separately published Web services within the application server based on the mapping specified by the Web service deployment descriptor.

52-53. (Canceled).

54. (Previously Presented) The application server of claim 51, further comprising means for registering each of the deployed Web services with a Web services registry on the application server.

55. (Previously Presented) The application server of claim 54, wherein registering each of the deployed Web services comprises means for automatically registering each of the deployed Web services with a Java Naming and Directory Interface (JNDI) of the application server.

56. (Previously Presented) The application server of claim 51, wherein deploying each of the first and second virtual interfaces as separately published Web services within the application server comprises means for deploying the plurality of Web service operations and the plurality of Web service parameters in a Web services container of the application server

57. (Previously presented) The application server of claim 56, wherein the Web services container comprises a dedicated implementation container.

58. (Previously presented) The application server of claim 57, wherein the dedicated implementation container comprises an Enterprise Java Bean (EJB) container or a servlet container.